

## 9

# Trichoptera

By D. E. KIMMINS

The specimens of Trichoptera, collected by Mr. D. S. Fletcher during his 1952 Expedition to the Ruwenzori Range in Uganda, have added appreciably to our knowledge of the caddis-fly fauna of this area. He visited localities different from those worked by Dr. F. W. Edwards' 1934-5 Expedition and his collections were made at a different time of the year (July to September), Dr. Edwards having been in the Ruwenzori region during the months of December and January. These two factors have undoubtedly affected the composition of the present collection, and Mr. Fletcher has taken examples of no fewer than thirteen species not represented in the collections made by the 1934-5 Expedition. Of these, one genus, eight species and one subspecies are here described as new, out of a total of twenty-two species represented in the present collection.

The relative numbers of species represented in the various families remains much about the same as in the previous collection, the Leptoceridae still providing the greatest number of species. It is interesting to note that, as remarked by Mosely (1939), there are still no records of the Polycentropodid genus *Dipsendopsis* from this area.

The types of all new species described in this paper are located in the British Museum (Natural History).

### RHYACOPHILIDAE

#### *Synagapetus ungulatus exsectus* ssp.n. (Figures 1-3, p. 57)

RUWENZORI RANGE: Nyamaleju, 10,530 ft., 14-19.vii.1952, 4 ♂, 4 ♀.

General appearance as in *S. u. ungulatus* Mosely (1939, p. 34), except that the white tip to the antenna covers 10-11 segments.

♂ Genitalia. Of the general pattern of the nominate subspecies but differing in detail. The ninth tergite is rather more deeply excised and impressed at the centre of its apical margin, the lateral margins more sinuous. The tenth segment (lower penis-cover and membranous processes of Mosely's description) is rather more sinuous in outline from the side. The two thin, twisted processes both appear to arise from the left-hand margin of the segment. Their form probably varies in individuals. Clasper in side view deeper in relation to its length, its upper margin more humped, apex with a wide, shallow excision. One strong tooth on lower inner surface beyond midway, and a smaller one at the base, directed tailward, not inward.

Length of fore wing, ♂, 5 mm., ♀, 5.5 mm.

Holotype ♂ (with abdomen mounted in Canada balsam), allotype ♀ and paratypes pinned. In the dried example, little difference can be seen between this and the typical form, apart from the excised apex of the ♂ clasper. After clearing in KOH solution, other differences become evident and seem of sufficient importance to warrant the separation of the Nyamaleju examples as a subspecies.

## PHILOPOTAMIDAE

### *Wormaldia fletcheri* sp.n. (Figures 4-5, p. 58)

RUWENZORI RANGE: Nyamaleju, 10,530 ft., 14-19.vii.1952, 1 ♂.

Head and clothing fuscous. Antenna dark fuscous, with faint ochraceous annulations. Palpi fuscous. Thorax fuscous, tegulae ochraceous, legs fuscous. Wings pale fuscous, fore wing with very dark, almost piceous pubescence. Venation as in *W. kyanus* (Mosely).

♂ Genitalia. The ninth segment is reduced above to a narrow, transverse band, the apical ventral margin excised at its centre. The tenth segment is long, broad at its base, tapering to a thin, digitate apex; on each side near the base is a thin, tapering, blade-like spine. Cerci slender, about three-quarters as long as the tenth segment. Penis long, cylindrical, membranous, with a thin, sclerotized stiffening rib beneath. Clasper two-segmented, segments of about equal length. The basal segment from above is wide at its base, divergent, tapering towards its apex. From the side the upper margin is straight, lower excised. Terminal segment only slightly clavate from above, from the side gently constricted about midway. Its inner apical surface is set with rows of short, black teeth.

Length of fore wing, ♂, 8.5 mm.

Type ♂ pinned (with abdomen mounted in Canada balsam). This species may be separated from *W. kyanus* (Mosely) by the relatively shorter and less clavate clasper, which in dorsal view is wider at its base, apex of basal segment not dilated internally, and by the thin, blade-like processes of the tenth segment. From *W. rufiventris* Ulmer (described from a female) it may be separated by the presence of apical fork no. 4 in the fore wing and by its uniformly fuscous colouring.

### *Chimarra clara* (Mosely)

*Chimarra clara* Mosely (1939, p. 31).

RUWENZORI RANGE: Nyamaleju, 10,530 ft., 14-19.vii.1952, 1 ♀.

Recorded Distribution: Ruwenzori.

### *Chimarra foliata* sp.n. (Figures 6-8, p. 58)

RUWENZORI RANGE: Semliki Forest, 2850 ft., 22.viii.-3.ix.1952, 1 ♂.

The unique male was in rather poor condition and has been made into a microscope preparation. Little can be said of its general appearance except that it was blackish. Spurs 1.4.4. Fore wing with forks nos. 1, 2, 3, and 5, anastomosis straight and white. Hind wing with R<sub>1</sub> obsolete or fused with Sc, apical forks nos. 2 and 5 only present.

♂ Genitalia. The ninth segment is membranous above, the upper angles of the sclerotized lower part extended tailward in long, slender, caliper-like processes, their apices crossing. The tenth segment is composed of two foliate lobes, flexibly attached to the ninth segment, quadrate from above, surface undulating, each inner margin thickened and extended tailward in a slender, sinuous finger. Cerci short, broad and laterally compressed, situated below the produced calipers of the ninth segment. Penis long, curved, moderately stout at base, apex flattened dorso-ventrally, forming an elongate triangle from above, its lateral basal margins deflexed, and with two rounded dorsal humps. Clasper short and stout, subtriangular from beneath, quadrate from the side, with an upwardly directed lobe at the base, and with the upper apical angle of the clasper acute and curved inward.

Length of fore wing, ♂, 4.5 mm.

Type ♂ mounted in Canada balsam as a microscope preparation. This species differs from *C. georgensis* (Barnard) and *C. kabashana* Marlier in the absence of apical forks nos. 1 and 3 in the hind wing and in the form of the ♂ genitalia.

## PSYCHOMYIIDAE

### *Paduniella ankya* Mosely

Mosely (1939, p. 29).

RUWENZORI RANGE: Semliki Forest, 2850 ft., 22.viii-3.ix.1952, 1 ♂, 1 ♀.

Recorded Distribution: Ruwenzori.

### PARECNOMINA, gen. nov. (Figure 9, p. 59)

Spurs 3.4.4. Maxillary palp with the basal segment short, the second about half as long again as the basal, the third and fourth each about twice as long as basal, and the terminal segment about as long as the other four together. In the fore wing,  $R_1$  is forked at its apex; apical forks nos. 1, 2, 3, 4 and 5 all present. In the hind wing, Sc and  $R_1$  are not fused near the apex; discoidal cell present, linked by a cross-vein to  $R_1$ ; apical forks nos. 2, 3 and 5 present.

Type-species. *Parecnomiina forcipata* sp.n.

This genus, together with the Australian genus *Ecnomiina* Kimmins, differs from the other described genera of the Ecnominae in the presence in the hind wing of a closed discoidal cell and of apical fork no. 3. It differs from *Ecnomiina* in the presence in the fore wing of apical fork no. 1 and in having fork no. 4 sessile. The discoidal cell in both wings is longer and narrower, and the ♂ claspers are fused only at their extreme bases.

There are now five described genera in the Ecnominae, but *Ecnomiella* Mosely may possibly be a synonym of *Ecnomodes* Ulmer, the chief distinction between them being the number of spurs on the anterior tibia. This is not always a reliable generic distinction, and Mosely has already accepted, within the genus *Ecnomus* McLachlan, species with two or with three spurs on the anterior tibia.

KEY TO KNOWN GENERA OF **Ecnominae**

1. Hind wing with apical forks nos. 2 and 5; no discoidal cell . . . . .	3
Hind wing with apical forks nos. 2, 3 and 5; discoidal cell present . . . . .	2
2. Fore wing with all five apical forks present . . . . .	PARECNOMINA gen.n.
Fore wing with only apical forks nos. 2, 3, 4 and 5 present . . . . .	ECNOMINA Kimmins
3. Fore wing with R <sub>1</sub> forked at apex . . . . .	ECNOMUS McLachlan
Fore wing with R <sub>1</sub> simple . . . . .	4
4. Spurs 2.4.4. . . . .	ECNOMIELLA Mosely
Spurs 3.4.4. . . . .	ECNOMODES Ulmer

**Parecnomina forcipata** sp.n. (Figures 9–12, p. 59)

RUWENZORI RANGE: Semliki Forest, 2850 ft., 22.viii–3.ix.1952, 3 ♂.

Head dark brown, with piceous and golden hairs. Antennae fulvous, with fuscous annulations. Palpi fulvous. Thorax dark brown, with blackish hairs. Legs fulvous, with fuscous pubescence. Abdomen fuscous. Wings narrow, apices elliptical. Fore wing pale fuscous, pubescence fuscous, with golden irrorations, membrane with whitish areas at arculus, anastomosis, at apex of thyridial cell and along anterior branch of media. Hind wing smoky hyaline, with a whitish area at fork of media and on *r-III* cross-vein, pubescence fuscous, scanty. In fore wing, apical forks 1, 3 and 5 with footstalks, 2 and 4 sessile. In hind wing all apical forks with footstalks.

♂ Genitalia. The ninth segment is almost divided into tergite and sternite, the tergite narrow at the sides, widening above into a triangle overhanging the base of the tenth segment. Ninth sternite large, upper margin convex in side view, apical margin from beneath with a wide V-shaped excision, within which arise the claspers. The tenth segment forms two elongate, cercoid processes, each wide at the base in the side view, then abruptly narrowed, gradually dilating to about midway, finally tapering to a rounded, up-curved apex. From above, each process is slender, apex slightly clavate and setose; from the base, on the inner surface of each process arises a short, toothed branch, triangular in lateral aspect. Penis long and slender, slightly down-curved, on its upper surface at about midway bearing a number of long, slender, apically directed spines. Clasper short, about half as long as sternite, triangular, with a hooked apex in side view, parallel-sided, with an incurved apex in ventral aspect.

Length of fore wing, ♂, 5.5 mm.

Type ♂, mounted as a microscope preparation, and paratypes pinned.

**HYDROPSYCHIDAE****Hydropsyche namwa** Mosely

Mosely (1939, p. 23).

RUWENZORI RANGE: Mahoma River, 6700 ft., 13–16.viii.1952, 3 ♂; Ibanda, 4–6.viii, 20–21.viii, 4–12.ix.1952, 3 ♂, 19 ♀.

Recorded Distribution: Ruwenzori.

**Hydropsyche bwambana** Mosely

Mosely (1939, p. 24).

RUWENZORI RANGE: Bundibugyo, 3440 ft., 22.viii-3.ix.1952, 1 ♂.

Recorded Distribution: Ruwenzori.

**Hydropsyche wamba** Mosely

Mosely (1939, p. 25).

RUWENZORI RANGE: Mahoma River, 6700 ft., 13-16.viii.1952, 19 ♂, 10 ♀; Ibanda, 4700 ft., 20-21.viii, 4-12.ix.1952, 6 ♂, 3 ♀.

Recorded Distribution: Ruwenzori.

**Hydropsyche** sp.

RUWENZORI RANGE: Mohama River, 6700 ft., 13-16.viii.1952, 1 ♂ (damaged).

**Diplectronella afra** Mosely

Mosely (1939, p. 202, 1939, p. 28).

RUWENZORI RANGE: Semliki Forest, 2850 ft., 22.viii-3.ix.1952, 4 ♂, 1 ♀.

Recorded Distribution: Uganda (Kampala and Ruwenzori).

**HYDROPTILIDAE****Ugandatrichia nigra** Mosely

Mosely (1939, p. 37).

RUWENZORI RANGE: Mahoma River, 6700 ft., 13-16.viii.1952, 1 ♂.

Recorded Distribution: Ruwenzori.

**LEPTOCERIDAE****Athripsodes bifidus** sp.n. (Figures 13-15, p. 59)

RUWENZORI RANGE: Ibanda, 4700 ft., 20-21.viii.1952, 2 ♂.

Head fuscous, with whitish hairs. Antenna fuscous, with whitish hairs on basal segment and with a basal patch of white pubescence on the upper side of the remaining segments, becoming progressively smaller. Palpi fuscous with sparse fuscous pubescence. Thorax fuscous, with scattered whitish hairs. Legs fulvous, with ochraceous pubescence. Abdomen fuscous.

Fore wing pale fuscous, with mixed fuscous and whitish pubescence, probably rather denuded in the type-series. Hind wing brownish hyaline, pubescence scanty and fuscous. In fore wing, apical fork no. 1 and fourth apical cellule each about twice as long as its footstalk. Discoidal and thyridial cells long, each one and a half times as long as its footstalk, the thyridial cell extending more basal than the discoidal. In hind wing, apical fork no. 1 as long as, and fourth apical cellule rather longer than, their respective footstalks.

♂ Genitalia. The ninth segment is bilobed at its dorsal apical margin. The tenth segment is partly fused to the ninth, forming a deep, bifid hood, acute apically from the side; from above it is rather laterally compressed, with a narrow excision between the two slightly incurving branches. Cerci flattened, sub-triangular, welded to the tenth segment. Clasper long, slender, bent abruptly upward at the base and then obliquely tailward and inward at about midway, whence there arises a slender, articulated branch with a bifid apex, whose lower fork is rather less acute.

Length of fore wing, ♂, 11.5 mm.

Type pinned, with apex of abdomen mounted in Canada balsam. In its comparatively simple, two-branched clasper this species more resembles the European species of the *fulvus-alboguttatus* group than it does most of the described African species of the genus. From *A. asanus* (Mosely) it may be distinguished by its simpler tenth segment and the more slender claspers.

***Athripsodes quadrispinus* sp.n.** (Figures 16-19, p. 60)

RUWENZORI RANGE: Mahoma River, 6700 ft., 13-16.viii.1952, 1 ♂.

Head piceous, with fuscous hairs. Antenna fuscous, joints finely annulated with piceous, segments in basal half of antenna ochraceous at base. Palpi fuscous. Thorax piceous, hairs fuscous. Legs pale fuscous. Abdomen fuscous.

Wings fuscous, pubescence dark fuscous. In fore wing, fork no. 1 with a very short footstalk, fourth apical cellule about three times as long as its footstalk. Discoidal cell about twice as long as its footstalk, thyrudial cell about equal to its footstalk.

♂ Genitalia. Dorsal apical margin of the ninth segment bilobed. The tenth segment forms a short, deep hood, in dorsal aspect divided into two halves by a deep, narrow excision; each half is roundly excised at its apex, so that the apical margin of the tenth segment from above shows two pairs of processes. The inner, upper pair are acute in dorsal aspect, rounded from the side, and the outer pair are truncate from above, rounded from the side. Cerci forming quadrate plates, welded at their bases to the tenth segment. Penis moderately long, down-curved, with two pairs of spine-like sheaths arising from its dorsal surface at the base. The inner upper pair is about half as long as the other pair. Clasper short, broad at its base, with a sub-terminal, claw-like branch beneath, which extends beyond the apex of the clasper. Within, at the base of the clasper, is a short, setose branch. From the ventral margin of the ninth segment arises a pair of tapering, spatulate lobes.

Length of fore wing, ♂, 9.5 mm.

Type ♂ pinned, with apex of abdomen mounted in Canada balsam. In structure of genitalia, this species resembles *A. asanus* (Mosely), also from Ruwenzori, but is amply distinguished by its more hooded tenth segment, quadrate cerci, two pairs of penis-sheaths, different form of the clasper and the spatulate ventral processes of the ninth segment.

***Athripsodes varius* sp.n.** (Figures 20-22, p. 60)

RUWENZORI RANGE: Mahoma River, 6700 ft., 13-16.viii.1952, 5 ♂, 1 ♀; Ibanda, 4700 ft., 20-21.viii.1952, 2 ♂, 2 ♀.

Head fuscous, with fuscous and pale ochraceous hairs. Antennae ochraceous, with joints annulated with fuscous. Palpi dark fuscous, with ochraceous hairs. Thorax warm fuscous, legs

fulvous, anterior pair darker, apparently with only one spur on anterior tibia. Abdomen fuscous.

Fore wing speckled with fuscous and ochraceous pubescence, the fuscous colour predominating near the stigma and towards the apex of the wing. Hind wing with sparse fuscous pubescence. In fore wing, apical fork no. 1 twice, and fourth apical cellule nearly twice, as long as their respective footstalks, bases of discoidal and thyridial cells at about the same level. Hind wing distinctly wider than fore wing, fork no. 1 and fourth apical cellule each rather longer than its foot-stalk but not twice as long.

♂ Genitalia. The dorsal margin of the ninth segment is triangularly produced at its centre. Cerci long and slender, about two-thirds as long as claspers, sparsely hairy. The tenth segment forms a pair of slender, acute spines, about as long as cerci, apices curved downward. There are no lateral processes, but beneath the spines is a thin, tapering, semi-membranous lobe. Penis strongly recurved downward and basad at about midway. Clasper long, in side view with a broad base, the upper apical angle of which is produced in a short setose finger and the lower apical angle forming an incurved triangular plate. Between these angles the main part of the clasper extends in a long, slender, forcipate finger, slightly sinuous about midway. From the inner surface of the clasper near its base arises a more slender process, a little shorter but dilating to a clavate apex, from above slightly sinuous.

Length of fore wing, ♂, 9-10 mm., ♀, 8 mm.

Type ♂, mounted as a microscope preparation, allotype ♀, pinned, both from the Mahoma River, and paratypes (pinned). The generic placing of this species is perhaps open to question. The venation of both the ♂ and ♀ fore wing indicates that it should be placed in *Athripsodes*. I have not been able to trace a second spur on the anterior tibia, and the genitalia of the male certainly recall that of the European species *Homilia leucophaea* (Rambur), in which, however, the venation of the fore wing is alike in both sexes. I have therefore decided to place this species in *Athripsodes*, where there are already several other species with similar characteristics, and to one of which, *Athripsodes fissus* (Ulmer), the present species shows considerable similarity. It differs chiefly in the absence from the tenth segment of the curved, clavate, lateral processes, and in the different proportions of the basal and the apical parts of the clasper.

### ***Triaenodes wambana* Mosely**

Mosely (1939, p. 15).

RUWENZORI RANGE: Bundibugyo, 3440 ft., 22.viii-3.ix.1952, 1 ♂.

Recorded Distribution: Ruwenzori.

### ***Triaenodes elegantula* Ulmer**

Ulmer (1908, p. 6).

RUWENZORI RANGE: Semliki Forest, 2700 ft., Hot Springs, 28.viii-1.ix.1952, 1 ♂.

Recorded Distribution: Tanganyika (Usambara), Zululand.

### ***Adicella magna* sp.n. (Figures 23-25, p. 61)**

RUWENZORI RANGE: Ibanda, 4700 ft., 4-12.ix.1952, 1 ♂; Mahoma River, 6700 ft., 13-16.viii.1952, 1 ♀, referred with some doubt to this species.

Head dark fulvous, with dense ochraceous hairs. Antenna ochraceous, joints obscurely fuscous. Palpi fulvous. Thorax fulvous, above with two longitudinal lines of short ochraceous hairs. Legs and abdomen ochraceous.

Wings hyaline, pubescence sparse, ochraceous, apical cellules of fore wing with small, obscure areas of fuscous pubescence. In fore wing apical fork no. 1 as long as its footstalk, fourth apical cellule sessile. Thyridial cell nearly twice as long as discoidal. In hind wing, apical fork no. 1 shorter than its footstalk, fourth apical cellule sessile.

♂ Genitalia. The ninth segment is moderately produced at the centre of its dorsal margin in a blunt triangle, beyond which are two small, membranous, triangular processes. The tenth segment is short, its sides much produced downwards in rounded, slightly incurved lobes. Between these lobes the apical margin projects in a truncated triangle, narrowly excised at its centre and with a divergent, truncated process on each side. Cerci large, rounded in side view, truncate from above, welded basally to the tenth segment. Penis short, stout, down-curved; within it, in a cleared preparation, can be seen a short, rod-like structure and a number of spiniform hairs. Clasper of moderate length, slender from the side, but from above rather broader, particularly at the base; apex rounded, hooked inwards and carrying several stout teeth.

Length of fore wing, ♂, 8 mm.

Type ♂, with abdomen mounted in Canada balsam. The female from the Mahoma River is referred with some uncertainty to this species chiefly on the evidence of similarity of appearance. It is rather larger than the male (fore wing 9 mm.). This species is closely related to *A. monachus* Barnard, but differs in its larger size, more rounded cerci and the more complex structure of the central part of the tenth segment, which is separated from the side lobes by a wide, rounded excision.

#### ***Adicella silvestris* sp.n.** (Figures 26-28, p. 61)

RUWENZORI RANGE: Semliki Forest, 2850 ft., 22.viii-3.ix.1952, 17 ♂, 7 ♀.

The general appearance is that of a small example of *A. magna* sp.n. The apex of the fore wing is marked with small areas of fuscous pubescence at the margins of apical cellules two to six (not present in the type of *A. magna*). In the fore wing, apical fork no. 1 is twice the length of its footstalk, fourth apical cellule sessile; in hind wing, fork no. 1 as long as its footstalk, fourth apical cellule sessile.

♂ Genitalia. The ninth segment is moderately produced in a truncated, dorsal triangle. The tenth segment is short, directed obliquely downward, not excised in the side view, but with a pair of transparent fingers arising from its upper surface. Cerci short, truncate, bases welded to the tenth segment. Penis short and stout, curved downward, enclosing a short spine. Clasper bent upward in side view, from behind broad basally, then abruptly constricted to about half the basal width, spatulate, armed on inner, upper surface with about three stout teeth.

Length of fore wing, ♂, 6 mm., ♀ 5-6 mm.

Type ♂ pinned (with abdomen mounted in Canada balsam), allotype ♀ and paratypes pinned. This species is also closely related to *A. monachus* Barnard, but differs in having two finger-like processes on the tenth segment, which is shorter, and in the less clavate apex of the clasper.



## SERICOSTOMATIDAE

**Goerodes edwardsi** Mosely

Mosely (1939, p. 5).

RUWENZORI RANGE: Nyamaleju, 10,530 ft., 14-19.vii.1952, 3 ♂; Semliki Forest, 2850 ft., 22.viii-3.ix.1952, 1 ♂.

Recorded Distribution: Ruwenzori.

**Goerodes excelsior** (Navás)

*Crumoeciella excelsior* Navás (1931, p. 132).

*Goerodes excelsior* (Navás), Mosely (1939, p. 6).

RUWENZORI RANGE: Nyamaleju, 10,530 ft., 14-19.vii.1952, 1 ♂; Semliki Forest, 2850 ft., 22.viii-3.ix.1952, 3 ♂.

Recorded Distribution: Ruwenzori.

**Goerodes inferior** (Navás)

*Crumoeciella inferior* Navás (1931, p. 135).

*Goerodes inferior* (Navás), Mosely (1939, p. 7).

RUWENZORI RANGE: Mahoma River, 6700 ft., 13-16.viii.1952, 5 ♂, 8 ♀; Ibanda, 4700 ft., 4-12.ix.1952, 6 ♂, 1 ♀.

Recorded Distribution: Ruwenzori.

**Goerodes nudata** (Navás)

*Crumoeciella nudata* Navás (1931, p. 134).

*Goerodes nudata* (Navás), Mosely (1939, p. 10).

RUWENZORI RANGE: Nyinabitaba, 8650 ft., 7-13.vii.1952, 1 ♂; Nyamaleju, 10,530 ft., 14-19.vii.1952, 3 ♂.

Recorded Distribution: Ruwenzori.

**Goerodes** sp.

RUWENZORI RANGE: Nyinabitaba, 8650 ft., 7-13.vii.1952, 6 ♀; Nyamaleju, 10,530 ft., 14-19.vii.1952, 4 ♀.

**Goerodes** sp.

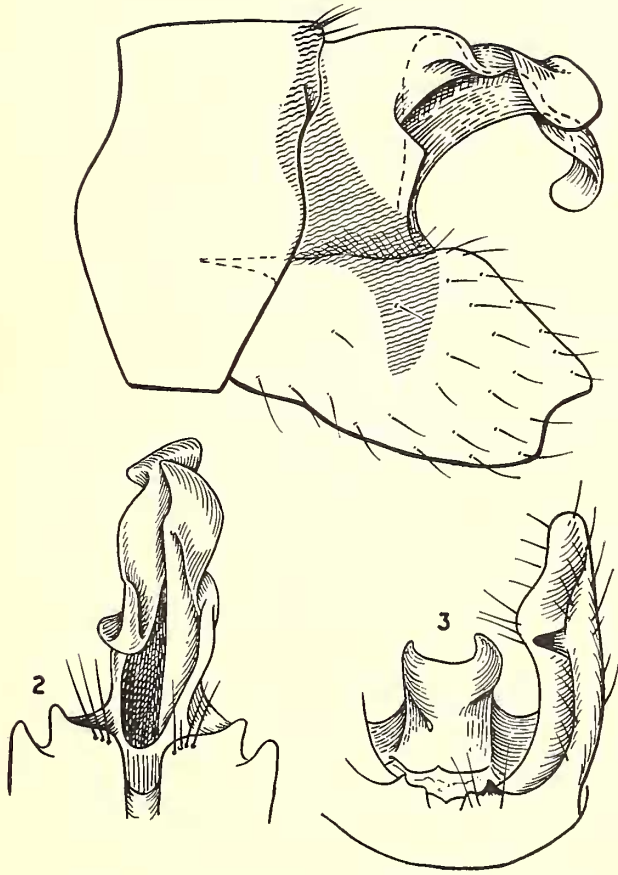
RUWENZORI RANGE: L. Bujuku, 13,050 ft., 22-28.vii.1952, 1 ♂.

## Combined List of Species represented in the 1934-5 and 1952 Expeditions

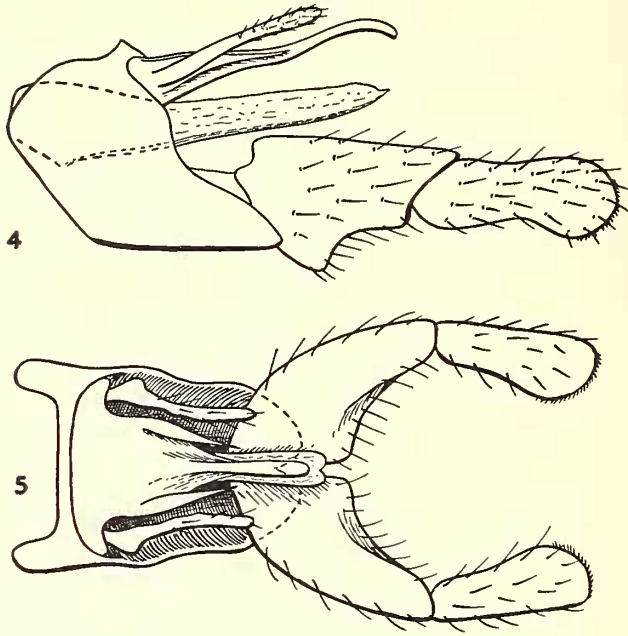
	1934-5	1952		1934-5	1952
<b>Rhyacophilidae</b>			<b>Calamoceratidae</b>		
1. <i>Synagapetus u. ungulatus</i> (Mosely)	×		20. <i>Anisocentropus usambarensis</i> Ulmer	×	
2. <i>S. ungulatus exsectus</i> sp.n.		×			
<b>Philopotamidae</b>			<b>Leptoceridae</b>		
3. <i>Wormaldia kyanus</i> (Mosely)	×		21. <i>Atlripsodes asanus</i> (Mosely)	×	
4. <i>W. fletcheri</i> sp.n.		×	22. <i>A. bifidus</i> sp.n.		×
5. <i>Chimarra clara</i> (Mosely)	×	×	23. <i>A. quadrispinus</i> sp.n.		×
6. <i>C. zoria</i> (Mosely)	×		24. <i>A. varius</i> sp.n.		×
<i>Chimarra</i> sp. ♀	×		<i>Atlripsodes</i> sp. ♀	×	
7. <i>C. foliata</i> sp.n.		×	25. <i>Leptocerina talopa</i> Mosely	×	
<b>Psychomyiidae</b>			26. <i>Triaenodes legona</i> Mosely	×	
8. <i>Lype afra</i> Mosely	×		27. <i>T. wambana</i> Mosely	×	×
9. <i>Paduniella ankya</i> Mosely	×	×	28. <i>T. elegantula</i> Ulmer		×
10. <i>Parecnomina forcipata</i> gen. sp.n.		×	29. <i>Triaenodella hastata</i> (Ulmer)	×	
<b>Hydropsychidae</b>			30. <i>Oecetis kathia</i> Mosely	×	
11. <i>Hydropsyche namwa</i> Mosely	×	×	31. <i>O. angustipennis</i> Mosely	×	
12. <i>H. bwambana</i> Mosely	×	×	32. <i>O. portalisensis</i> Mosely	×	
13. <i>H. wamba</i> Mosely	×	×	33. <i>O. thikanensis</i> Mosely	×	
<i>Hydropsyche</i> sp.		×	34. <i>Leptocerus intricatus</i> (Mosely)	×	
14. <i>Cheumatopsyche trifida</i> Mosely	×		35. <i>Adicella magna</i> sp.n.		×
<i>Cheumatopsyche</i> sp. ♀	×		36. <i>A. silvestris</i> sp.n.		×
15. <i>Diplectronella afra</i> Mosely	×	×	<b>Sericostomatidae</b>		
<b>Hydroptilidae</b>			37. <i>Goerodes edwardsi</i> Mosely	×	×
16. <i>Afritrichia aurea</i> Mosely	×		38. <i>G. excelsior</i> (Navás)	×	×
17. <i>Ugandatrighia minor</i> Mosely	×		39. <i>G. inferior</i> (Navás)	×	×
18. <i>U. nigra</i> Mosely	×	×	40. <i>G. nudata</i> (Navás)	×	×
19. <i>U. acuta</i> Mosely	×		<i>Goerodes</i> sp. ♀		×
			<i>Goerodes</i> sp. ♂		×

## References

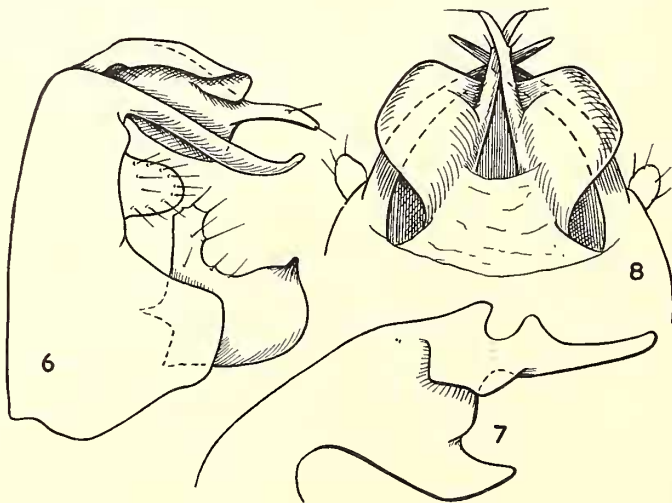
- MOSELY, M. E., 1931. Ann. Mag. N. H., (10) 8.  
MOSELY, M. E., 1939. Ruwenzori Expedition, 1934-5, 3 (1).  
NAVÁS, L., 1931. Brotéria, Zool., 27.  
ULMER, G., 1908. Sjoestedt's Zoologische Kilimandjaro-Meru Expedition, 2 (13).



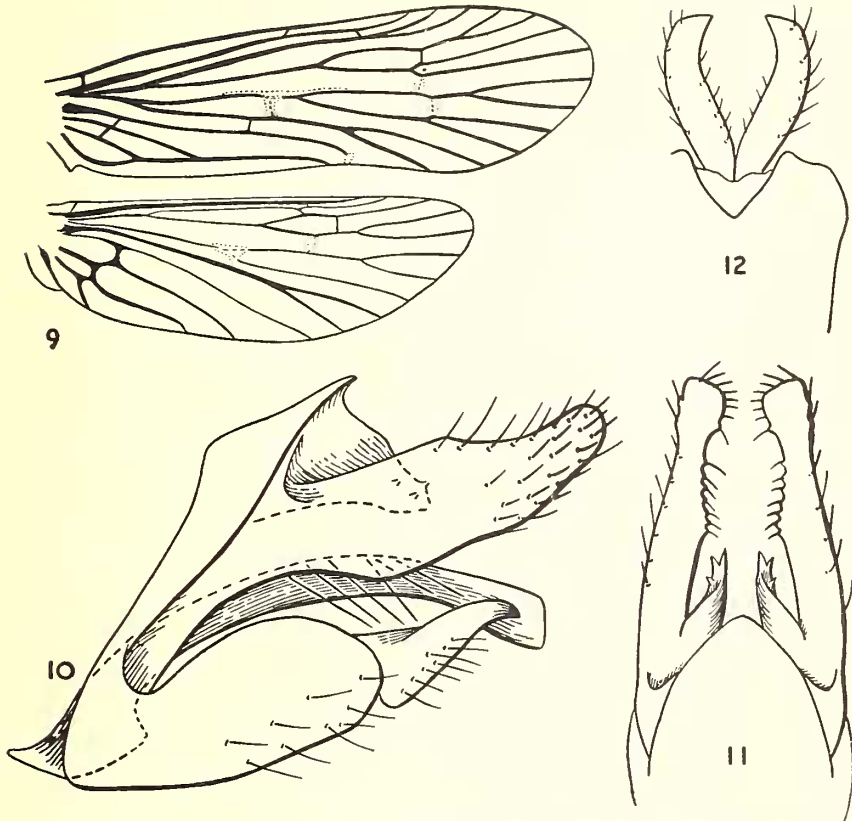
FIGS. 1-3. *Synagapetus ungulatus exsectus* ssp.n. ♂ genitalia (penis omitted). 1, lateral; 2, ninth and tenth segments, dorsal; 3, right clasper and lower part of tenth segment, ventral



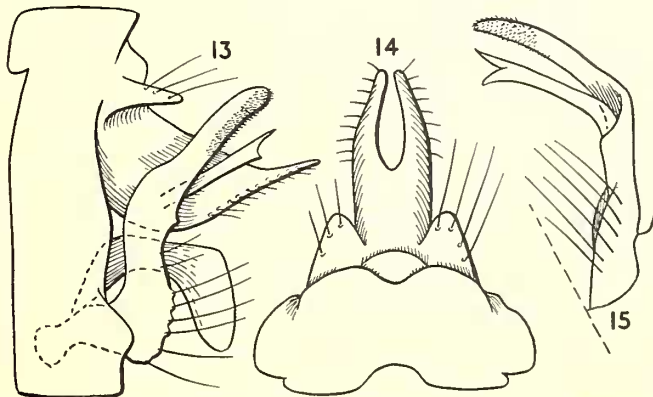
FIGS. 4-5. *Wormaldia fletcheri* sp.n. ♂ genitalia. 4, lateral; 5, dorsal



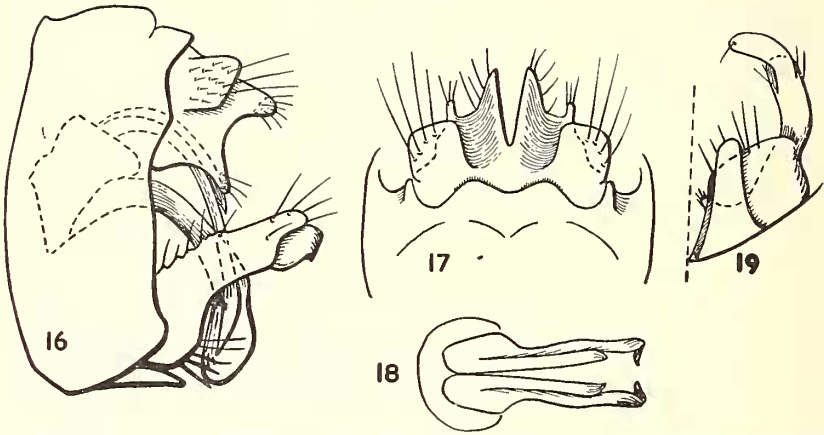
FIGS. 6-8. *Chimarra foliata* sp.n. ♂ genitalia. 6, lateral, penis omitted; 7, penis, lateral; 8, ninth and tenth segments dorsal



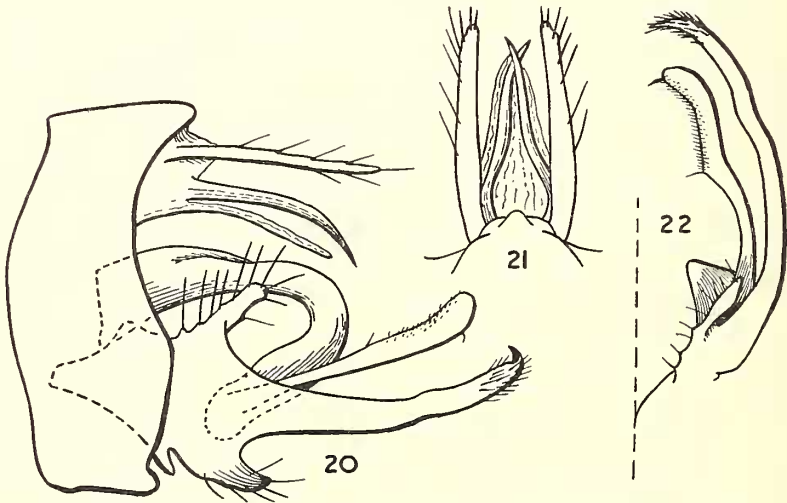
FIGS. 9-12. *Parecnomina forcipata* gen. sp.n. ♂ wings and genitalia. 9, wings; 10, genitalia, lateral; 11, ninth and tenth segments, dorsal; 12, ninth segment and claspers, ventral



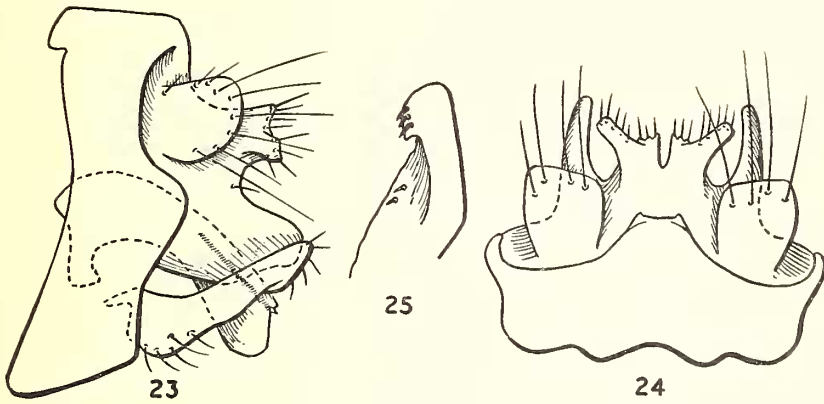
FIGS. 13-15. *Athripsodes bifidus* sp.n. ♂ genitalia. 13, lateral; 14, ninth and tenth segments, dorsal; 15, right clasper from behind



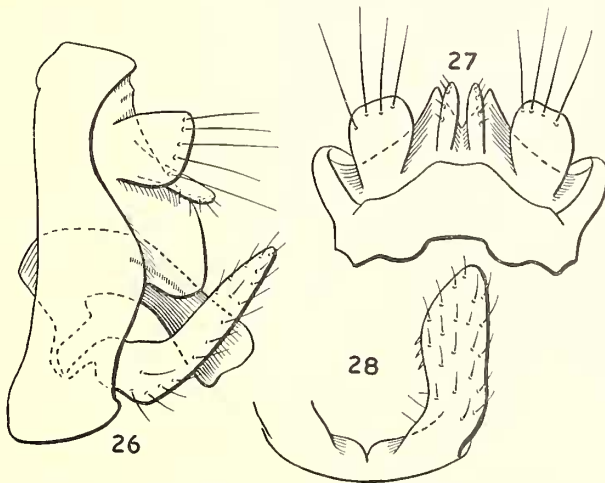
FIGS. 16-19. *Athripsodes quadrispinus* sp.n. ♂ genitalia. 16, lateral; 17, ninth and tenth segments dorsal; 18, penis-sheaths from behind; 19, right clasper and margin of ninth segment, ventral



FIGS. 20-22. *Athripsodes varius* sp.n. ♂ genitalia. 20, lateral; 21, margin of ninth and tenth segments, dorsal; 22, right clasper, ventral



FIGS. 23-25. *Adicella magna* sp.n. ♂ genitalia. 23, lateral; 24, ninth and tenth segments, dorsal; 25, left clasper, dorsal



FIGS. 26-28. *Adicella silvestris* sp.n. ♂ genitalia. 26, lateral; 27, ninth and tenth segments, dorsal; 28, right clasper from behind